

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

The Effect of Eight Weeks of FIFA+11 Program on Landing Error Scoring System and Knee Joint Repositioning Error After Functional Fatigue in Adolescent Girl Soccer Players with Dynamic Knee Valgus

Protocol summary

Study aim

The aim of this study is to investigate the effect of eight weeks of FIFA +11 injury prevention program on the landing error scoring system and knee joint repositioning error after applying functional fatigue in 13-17 year old female soccer players with dynamic knee valgus in the city of Kerman.

Design

The clinical trial will have two control and experimental groups, be single-blinded, and randomized. Randomization will be performed using the website www.randomizer.org.

Settings and conduct

This study will be conducted in Kerman city and at Shahin Football Academy. Players who meet all the inclusion criteria will be randomly divided into two control and experimental groups. In the pre-test, the player will first be given the LESS test and the knee joint repositioning error test. After that, the player will perform the fatigue protocol for five minutes and immediately after that, she will repeat the initial tests. After that, the experimental group will perform the FIFA +11 injury prevention program for eight weeks. After implementing the protocol, the post-test will be repeated as in the pre-test.

Participants/Inclusion and exclusion criteria

Female soccer players aged 13 to 17 years; with written consent from their guardians or parents to participate in the study; healthy players with no reports of pain; at least 2 years of experience playing soccer; and meeting the criteria for dynamic knee valgus.

Intervention groups

The FIFA +11 injury prevention program consists of three parts with a total of 15 different exercises that replace the usual warm-up program. This program will be applied to the experimental group for 8 weeks. The control group will continue their general warm-up.

Main outcome variables

Landing Error Scoring System (LESS) ; Knee Joint Repositioning Error

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20250818066901N1**

Registration date: **2025-09-24, 1404/07/02**

Registration timing: **prospective**

Last update: **2025-09-24, 1404/07/02**

Update count: **0**

Registration date

2025-09-24, 1404/07/02

Registrant information

Name

fatemeh asadi khanouki

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 34 3375 2839

Email address

ftm.asadi.80@sport.uk.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-10-07, 1404/07/15

Expected recruitment end date

2025-12-06, 1404/09/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Eight Weeks of FIFA+11 Program on Landing Error Scoring System and Knee Joint Repositioning Error After Functional Fatigue in Adolescent Girl Soccer Players with Dynamic Knee Valgus

Public title

The Effect of Eight Weeks of FIFA+11 Program on Landing Error Scoring System and Knee Joint Repositioning Error After Functional Fatigue in Adolescent Girl Soccer Players with Dynamic Knee Valgus

Purpose

Prevention

Inclusion/Exclusion criteria**Inclusion criteria:**

Female soccer players aged 13 to 17
Written consent from guardian or parent to participate in the research
Healthy player with no reports of pain
At least 2 years of experience playing football
With dynamic knee valgus

Exclusion criteria:

Players with a history of injury or illness
Goalkeepers

Age

From **13 years** old to **17 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **24**

Randomization (investigator's opinion)

Randomized

Randomization description

Players whose dynamic knee valgus criteria have been confirmed will be divided into the two groups of control and experimental by using the www.randomizer.org website.

Blinding (investigator's opinion)

Single blinded

Blinding description

After randomization, the experimental and control groups will be tested on separate days. The protocol for the experimental group will also be started before the team's group practice begins. The experimental group will be asked not to share information about the protocol with others.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Research Ethics Committee of Kerman University of Medical Sciences

Street address

Pajoohesh Sq., Shahid Bahonar University, Kerman

City

Kerman

Province

Kerman

Postal code

76169-14111

Approval date

2025-08-17, 1404/05/26

Ethics committee reference number

IR.KMU.REC.1404.274

Health conditions studied**1****Description of health condition studied**

Dynamic knee valgus

ICD-10 code

M21.06

ICD-10 code description

Valgus deformity, not elsewhere classified, knee

Primary outcomes**1****Description**

Landing Error Scoring System

Timepoint

In the pre-test before and after the fatigue, in the post-test before and after the fatigue

Method of measurement

LESS box, two video cameras, Kinovea software

2**Description**

Knee joint repositioning error

Timepoint

In the pre-test before and after the fatigue, in the post-test before and after the fatigue

Method of measurement

Goniometer

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: FIFA +11 has three parts with a total of 15 different exercises that replace the usual warm-up program. The first part includes slow-paced running exercises, active stretching, and controlled contact with a partner. Running takes place around six to ten pairs of cones (depending on the number of players) that are between five and six meters apart (length and width). The running exercise includes running straight forward and running fast forward and backward. The second part includes six different sets of exercises: strength, balance, and jumping, each with three levels of increasing difficulty. The final part includes sprinting with soccer-specific movements, bonding, and cutting and changing direction exercises. The duration of each session is approximately 20 to 25 minutes. In the current study, this program will be performed three times a week for eight weeks under the supervision of the researcher.

Category

Prevention

2

Description

Control group: General warm-up group

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahin Football Club

Full name of responsible person

Fatemeh Asadi

Street address

Kerman, Kargar Street, Shahin Football Club

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Kerman

Province

Kerman

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7614843315

Phone

+98 34 3312 4237

Email

fatemeh.asadi.2201@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Bahonar University of Kerman

Full name of responsible person

Alireza Saeedi

Street address

Pajooheh Sq., Shahid Bahonar University, Kerman

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ftm.asadi.80@sport.uk.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Shahid Bahonar University of Kerman

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Shahid Bahonar University of Kerman

Full name of responsible person

Fatemeh Asadi

Position

student

Latest degree

Bachelor

Other areas of specialty/work

Sports injury and corrective exercises

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Person responsible for scientific inquiries

Contact

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Full name of responsible person

Fatemeh Asadi

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

There is no further information.

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The protocol implemented in this project will be made available to the applicant through the corresponding author after the publication of the article.

When the data will become available and for how long

No.

To whom data/document is available

Students and researchers

Under which criteria data/document could be used

There is no specific case.

From where data/document is obtainable

Responsible author

What processes are involved for a request to access data/document

The applicant can communicate his/her request to the responsible author via email.

Comments**Person responsible for updating data****Contact****Name of organization / entity**

Shahid Bahonar University of Kerman

Full name of responsible person

Fatemeh Asadi

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Sports injury and corrective exercises

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